

Department of Planning, Housing and
Infrastructure
4 Parramatta Square,
12 Darcy Street,
Parramatta NSW 2150

**Attachments: Comments Register [electronic copy]
FIRA (Rev C)**

Your Reference

Nicholson Place St Leonards Build-to-Rent (SSD-
88113706)

Our Reference

703104098

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**46-52 Nicholson Street and 59-67 Christie Street,
St Leonards | Build-to-Rent**

16 February 2026

Dear Jude,

Thank you for providing the agency feedback regarding the proposed development at Nicholson Street. I appreciate the opportunity to provide further clarification in relation to the recently prepared SSDA documents by Mott MacDonald (MM), including Flood Impact and Risk Assessment (FIRA), with common elements with the Integrated Water Management Plan (IWMP) and Civil Engineering Drawings.

This correspondence is submitted in response to the stormwater and flooding comments outlined in Attachment A of the Department of Planning, Housing and Infrastructure (DPHI) letter dated 17 December 2025, and the NSW State Emergency Service (SES) letter dated 10 December 2025. We trust that our response addresses the queries that have been raised.

DPHI Letter (Attachment A)

DPHI – Flooding, issues raised:

1. Use of disclaimers
2. Mapping, relevant guidance, catchment and model parameters and observations from previous proposed development at the site
3. Civil works extent, Council approvals and flood impacts
4. Mapping intervals and flood impacts
5. Flood emergency response complexity
6. Shelter-in-place recommendations

MM Response: An updated FIRA (C) has been provided to include additional technical detail relating to the model configuration, event magnitudes, impacts and additional result outputs and processed maps. Further discussion and refinement of the recommended emergency response has been included to a) simplify, and b) provide clarity on the anticipated response. Note the flood emergency response is to be detailed specific to the final design as it is derived during detailed design.

State Emergency Service (SES) Letter

SES makes recommendations to the refuge levels, design of buildings for safety during flooding amongst other infrastructure upgrade commentary.

MM Response: The revised FIRA (C) details further refinements made to the design after receipt of agency responses. Details on the level of openings and the levels to which flood protection is afforded the design have been provided in the attached spreadsheet and are contained within the updated FIRA.

I trust the responses within the attached spreadsheet and updated FIRA (Revision C) offer clarity regarding the flooding and stormwater drainage aspects of the proposed development and illustrates that appropriate consideration has been given to mitigating risk to occupants, property and infrastructure.

Kind regards,

Jeffrey Mail
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A handwritten signature in dark ink, appearing to read 'Jeffrey Mail', is positioned to the right of the printed contact information.

Conservative Programs, Heritage and Regulation Group comments						Designer's Response			CPHR Comments		
Item No.	Document Title	Reviewer Name	Reviewer Comment Date	Comment from the Reviewer	Reviewer Recommended actions	Designer Response Date	Designer Name	Designer Response / Action for Resolution	Closed by CPHR?	Date Item Closed	Notes
1	The Flood Impact Risk Assessment (FIRA)	S. Burke	17/12/2025	Disclaimers on both the FIRA and the IWMP do not permit use by any party other than the applicant CPHR relies on the adequacy of supplied reports to carry out assessment of the flood related SEARs. Disclaimers that do not allow another party to rely on the advice mean that it is not possible for CPHR to determine if the SEARs are met.	Reports prepared in support of a development must be sufficiently robust for a consent authority to rely on the information provided. For flood risk assessment the reports are used to determine appropriate flood planning levels, offsite impacts and risk posed from and to the development. The consultant should ensure that sufficient investigations are undertaken, and the reports provided for the express purpose of allowing an assessment of the project. Reports should be updated to include adequate assessment and remove inappropriate disclaimers.	13-Feb-26	Jeffrey Mail	The FIRA is issued for the party which commissioned it and for specific purposes. MM revised the FIRA (C) Section 1.1 to include specific purposes regarding issue of information to relevant agencies and approval authorities (permitting DPHI, CPHR, Lane Cove Council, NSW SES and their advisers to rely on them for assessing the SSDA and whether the Flood-related SEARs are met). MM retains appropriate limitations (scope, assumptions, data sources). The FIRA otherwise demonstrates sufficient investigations (site-specific 1D/2D TUFLOW model; ARR v4.2; NSW Flood Risk Management Manual 2023; Guidelines FB01 LU01 2023; CPHR 2023).			
2	The Flood Impact Risk Assessment (FIRA)		17/12/2025	The provided FIRA provides output maps for a limited number of flood scenarios and has not provided any details of how the flood assessment was carried out. The FIRA has not been prepared in accordance with the requirements of Flood Risk Management Guideline FB01 Understanding and managing flood risk or Flood Risk Management Guideline LU01 Flood impact and risk assessment. The FIRA does not document the catchment area used, rainfall data used, parameters and assumptions in the modelling, nor pipework included and has not been carried out for a range of flood events. The extent of the flood mapping provided is limited to the immediate proximity of the development and does not extend upstream or downstream to determine impact. When compared to flood reports provided in support of SSD-5627976 for development at 46-52 Nicholson Street, a discrepancy in reported flood levels of between 100 and 200mm is evident.	The FIRA to clearly define the catchment used and pipework included in the model. All model parameters and rainfall used to develop mapping is to be documented. The modelling is updated to show compliance with Flood Impact and Risk Assessment LU01 and extend far enough upstream and downstream to determine impacts. Results to be compared to the previous reports for SSD-5627976 unless alternative methods of calibration/validation can be provided.	13-Feb-26	Jeffrey Mail	MM revised the FIRA (C) with a Methods section documenting catchment delineation and the drainage/pipework represented in the model, with full rainfall/parameter tables and assumptions. Seciont 5 & 6 respond to requirements of the LU01/FB01. The model domain has been reviewed to ensure that areas upstream and downstream are represented sufficiently to capture off-site effects. Updated mapping is provided for the re-submission of FIRA (C). No regional modelling is available for the catchment. The previous analysis for prior development scheme does not represent an approved modelling basis from which to provide any validation for subsequent investigation. The FIRA (C) documents a detailed model build for the relevant overland flow catchment area using industry standard approaches and parameters in a highly impervious environment, in lieu of calibrated data, noting validation would not be appropriate to the previous SSD investigations. There are variables in grid-based hydrodynamic models and results are dependent on input terrain models, alignment of the processd grid to the input terrain models, pipe network assumptions and the previous scheme's model is not available for these issues to be explored			
3	The Flood Impact Risk Assessment (FIRA)		17/12/2025	Significant diversion of pipework and work in land outside the site is required. The IWMP proposes to divert and upgrade a drainage pipe around the site perimeter by works in the road reserve and roadway. There is no indication that Lane Cove Council has consented to these works. There are also a large number of services located in the proposed pipe location and it has not been demonstrated that the proposed works can be built as shown. The pipe sizes are proposed to be enlarged significantly however they join to small pipes near the sag point in Christie Street. It is not clear if this has resulted in flood impacts further down the council drainage network	Further investigation is required to demonstrate that the proposed pipe upgrade can be built and will be permitted by Lane Cove Council. Update the FIRA to include existing and proposed pipework to demonstrate that the upgraded pipe does not shift flooding to a downstream location.	13-Feb-26	Jeffrey Mail	Stormwater upgrades are part of the Civil works scope, with the proposed design providing improvements in access to the system should future maintenance be required. As noted in FIRA (C) section 5.4.1 this was then assessed in the impact analysis using detailed flood model to mitigate impacts. MM updated the FIRA (C) to include an existing-vs-proposed pipework schematic, with FIRA (Figure 5.5) already presenting hydraulic results showing no transfer of flood risk downstream through afflux assessment. Detailed capacity checks (including the Christie St sag junction) as documented by IWMP and Civil drawings - also subject to detailed design. Lane Cove Council is the approval authority and is copied in consultation to confirm the feasibility and permit pathway for the proposed road-reserve drainage upgrade			
4	The Flood Impact Risk Assessment (FIRA)		17/12/2025	The proposed development will result in unacceptable flood impacts outside of the site boundary. The proposed building footprint extends to the boundary of 29-57 Christie Street and results in a significant increase in flood levels in this location. The previous building was not on the boundary and allowed for the escape of water flowing along the common boundary. The building footprint may need to be amended to reinstate the flow path near the Christie Street frontage to mitigate offsite impacts. Impact mapping has been provided for the 1% AEP event and is misleading because impacts of greater than 1m are included in a category labelled greater than 0.05m	Provide mitigation measures to ensure that offsite impacts are limited to no greater than 10mm in the 1% AEP event and no change in flood hazard or behaviour occurs in larger events. Provide afflux mapping for events greater than the 1% AEP event and provide a table which states the increase in depth offsite for each event modelled.	13-Feb-26	Jeffrey Mail	Flow path is provided by the proposed design to limit offsite afflux, and FIRA (C) updated with new colour scheme to detail these flood impacts with more colour ranges. Design seeks to minimise changes in flood hazard/behaviour in larger events SFAIRP through flow path provision to neighbouring building. Section 5.4 discusses how flooding in the narrow area to adjacent southern neighbour is essentially shifted towards Christie Street. There is also a large depth decrease associated with this shift and this pulls the ponding further west, away from the neighbour's external pathway and egress stairs which experiences the deep ponding in existing conditions. The FIRA (C) is updated with like-for-like baseline and post-mitigation comparisons, afflux mapping for >1% events, and a summar of maximum offsite depth increases for the 1% AEP and PMF events.			
5	The Flood Impact Risk Assessment (FIRA)		17/12/2025	The FIRA contains a complex flood emergency response plan which does not manage risk to life The provided flood emergency response plan includes contradictory advice such as monitoring weather conditions, pre emptive evacuation and shelter in place. Evacuation is mentioned and later noted as being impractical. Mapping does not extend beyond the site therefore it is not possible to determine if support or evacuation can be achieved from other entry points. The location of the basement access in the most flood affected frontage of the site is likely to lead to residents trying to take cars from the basement through flood water rather than evacuate vertically. Time of isolation or management of secondary risk has	Recommendation action: ❗ Update the FIRA to contain an assessment of the ability to evacuation separate from any proposed shelter in place strategy and address the requirements of the Shelter-in Place guideline for flash flooding. ❗ Refer the FIRA and associated Flood Emergency Response Plan (FERP) to the NSW State Emergency Services (SES) for comment.	13-Feb-26	Jeffrey Mail	Ability to evacuate in the case of a dual emergency documented in addition to the proposed shelter in place strategy, and a table to show shelter in place compliance updated within FIRA (C) to address requirements: - Section 6.2 is renamed to Potential options, not to be confused with the recommendations for the development. - Section 6.3 is renamed to considerations - Section 6.4 is renamed as the Recommended response, including the additional notes on time of isolation and management of secondary risk. SSDA stage review comments (SES) have been received (on the Rev B FIRA) with appropriate updates added in Rev C FIRA.			
6	The Flood Impact Risk Assessment (FIRA)		17/12/2025	The proposed building has not demonstrated compliance with the requirements of DPHI Shelter in Place Guidance or EM01 Table 12 The building is proposed to accommodate a significant population in an area where evacuation is not feasible due to flash flooding. The building should therefore include requirements for structural adequacy up to the probable maximum flood (PMF) and provision of essential services during and after an event.	Basement entries, service ducts, and other openings to be protected from the PMF, ensuring the building remains operational during and after a flood event. Relocating all residents to an evacuation centre due to service failure is unlikely to be feasible.	13-Feb-26	Jeffrey Mail	Updates made to FIRA(C) to demonstrate compliance with DPHI Shelter in Place guidance and access points shown as above the PMF event. Section 6 prefaced with statement on the sealing of building openings to the PMF level. Section 6.5 Structural adequacy reommendation is made for the detailed design stage - as is common practice for structural design to consider load cases.			